



# **BOGE C series**





Over 100,000 compressed air users expect more when it comes to their compressed air supply. **BOGE Air provides them with the air to work.** 

Screw compressors custom made by BOGE have for decades been synonymous with efficient and reliable compressed air supply from trade workshops to industrial companies.

The BOGE C series is a trendsetter in its class: less noise, less pipework, less connections in contrast to more output, more individual configuration possibilities, more efficiency and requiring a minimum of space. We have listened closely to the wishes of our customers — with the C series we provide the air to work.

#### **CONTENTS**

OVERVIEW	4
BOGE C-SERIES	
up to 10 hp	6
up to 30 hp	12
BOGE SERVICE	18

## **Compressed air with a method:** Modules of the BOGE C series.



Screw compressor



**Compressed air receiver** 



Refrigerant dryer with prefilter



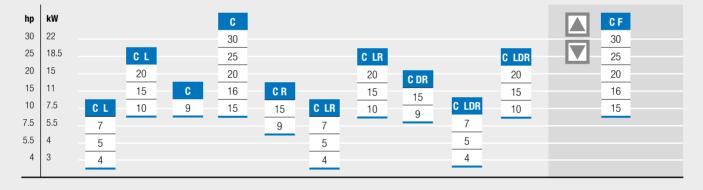
**Frequency control** 

#### **ADVANTAGES OF THE COMPACT MODULAR DESIGN:**

- Flexible combination possibilities
- Unit completely ready for connection
- Minimum flow losses due to compact construction
- High-quality piping protects against leaks

Modular design, compact system: Because of the modular design, BOGE screw compressors allow for individual configuration of your compressed air system. Each compact module is pre-assembled and ready for use: for efficient and reliable operation in all types of applications.

#### **PERFORMANCE OVERVIEW OF THE C SERIES**



frequency controlled



#### PREMIUM EFFICIENCY: IE3 MOTORS.

The C series compressors offer the best possible energy efficiency thanks to economical IE3 motors of the premium efficiency class.

#### **UNIQUE: BOGE GENUINE PARTS FOR THE C SERIES.**

Only the use of BOGE original parts will enable you to benefit from the technological edge of the C series in the long run. To this purpose, BOGE offers individually customized replacement parts for the C series guaranteeing 100 percent quality and 100 percent service life. Only such original parts are compatible with the compressors of the C series – for maximum safety during the entire service life period.

# The C series up to 5.5 kW: Space saving and more energy efficient than ever! Design advantages.

#### THE CM COMPACT MODULE:

All major components are integrated into the airend block. Maintenance and wear parts are easily accessible - for easy service and highest operational safety.

#### Integrated oil separating system

Both oil separating cartridge and oil filter cartridge are easily accessible: for maintenance purposes only the cover needs to be opened. The oil sump is located at the lowest point: for effective pre-separation according to the gravity principle.

Minimum pressure /

check valve\*

Multifunctional intake control with integrated solenoid valve for functionally reliable operation without leakages.

#### Silenced intake filter with paper filter cartridge

The filter separates 99.9 percent of all particles larger than 3 ppm: assuring high quality compressed air right at its source.

#### **BOGE** airend with special BOGE profile and heavy duty bearing

The specially designed airend is characterised by its high output and low energy consumption.



Ø

Ø

-

\*Minimum pressure / check valve

Integrated design eliminates piping for maximum leakage safety.

#### **Temperature sensor**

For safe operation and optimal monitoring of the compressor.

#### **CNC** machined cast iron housing

High quality machining eliminates the risk of leakage. The heavy cast iron housing also serves to reduce noise right at the source.

Thermo-static oil level regulation Easily accessible from the outside.

0

**Compact & highly efficient!** The monoblock compact design of the airend range up to 10 hp offers distinct advantages. The integrated design minimizes the number of oil pipes by clever internal routing for a highly efficient and reliable compressor. At the same time the airend requires less space providing the user with a compact, space saving and energy efficient solution from BOGE!



**COMPACT DESIGN** Integration of all essential components eliminates almost all interconnecting pipes. Leaks are virtually eliminated. Internal pressure losses are minimized.



#### **EXTREMELY QUIET**

Because of the sound adsorbing graphite casting the C series is very quiet in operation and vibration free. The enclosed versions C series and C series with dryer are therefore super-silent with low sound pressure values.



#### **HIGHEST EFFICIENCY**

The BOGE airend design ensures industry leading specific power ratios (Optimized output volumes at low energy consumption).



#### CONTROL

The compressor has the **base** control system with LC display and pressure transducer technology. **focus** control is available as an option that offers additional monitoring and control features. **focus** control 2.0 is also programmed to act as a changeover switch and can control up to four compressors.



#### **OPTIONAL FREQUENCY CONTROL**

The frequency converter flexibly controls the motor speed and therefore the airend. This ensures the compressor output automatically adjusts to the system demand. Soft starting via the frequency convertor also avoids undue wear and tear and prolongs the service life of the compressor.

17			7	
ι.				
				1
E.				Ľ.
l a				

#### **OPTIONAL DRYERS/AIR TREATMENT**

The C series tank mount can be equipped with a variety of dryers and filters to match system air requirements.

## Screw compressor **C 4 L N** to **C 7 L N** Compressed air system **C 4 LR N** to **C 7 LR N** Compressed air center **C 4 LDR N** to **C 7 LDR N**

Effective free air delivery:  $0.31 - 0.86 \text{ m}^3/\text{min}, 11 - 30 \text{ cfm}$ Pressure range: 8 and 10 bar, 115 and 150 psig Motor range: 3.0 - 5.5 kW, 4 - 7.5 hp



Compact screw compressor, direct coupled



BOC

## Compressed air system C LR N

Receiver mounted screw compressor, direct coupled





## Compressed air center C LDR N

Receiver mounted screw compressor, direct coupled with dryer and prefilter



The machines depiced do not correspond to the most updated version of the receivers and dryers.

BOGE Model	Max. pressure		Effective free air delivery* 60 Hz		Motor power		Power supply	Dimensions W x D x H	
	psig	bar	cfm	m³/min	hp	kW		inches	lbs.
C4LN	150	10	11	0.31	4.0	3.0	3-phase	30 x 19 x 19	243
C 5 L N	150	10	14	0.39	5.5	4.0	3-phase	30 x 19 x 19	276
C5LN	150	10	14	0.39	5.5	4.0	single-phase	30 x 19 x 19	276
C7LN	125	8.6	30	0.86	7.5	5.5	3-phase	30 x 19 x 19	287
C7LN	125	8.6	30	0.86	7.5	5.5	single-phase	30 x 19 x 19	298

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 61 dB(A) according to DIN EN ISO 2151:2009

BOGE Model	Max. pressure R		Receiver size	Effective free air delivery* 60 Hz		Motor power		Power supply	Dimensions W x D x H	Weight
	psig	bar	gallons		m³/min	hp	kW		inches	lbs.
C 4 LR N	150	10	80	11	0.31	4.0	3.0	3-phase	66 x 26 x 49	816
C 5 LR N	150	10	80	14	0.39	5.5	4.0	3-phase	66 x 26 x 49	849
C 5 LR N	150	10	80	14	0.39	5.5	4.0	single-phase	66 x 26 x 49	860
C 7 LR N	125	8.6	80	30	0.86	7.5	5.5	3-phase	66 x 26 x 49	860
C 7 LR N	125	8.6	80	30	0.86	7.5	5.5	single-phase	66 x 26 x 49	871

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 61 dB(A) according to DIN EN ISO 2151:2009

BOGE Model	Max. pressure		Receiver size	Effective free air delivery* 60 Hz		Motor power		Power supply	Dimensions W x D x H	Weight
	psig	bar	gallons		m³/min	hp	kW		inches	lbs.
C 4 LDR N	150	10	80	11	0.31	4.0	3.0	3-phase	66 x 29 x 49	904
C 5 LDR N	150	10	80	14	0.39	5.5	4.0	3-phase	66 x 29 x 49	937
C 5 LDR N	150	10	80	14	0.39	5.5	4.0	single-phase	66 x 29 x 49	948
C 7 LDR N	125	8.6	80	30	0.86	7.5	5.5	3-phase	66 x 29 x 49	968
C 7 LDR N	125	8.6	80	30	0.86	7.5	5.5	single-phase	66 x 29 x 49	979

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 61 dB(A) according to DIN EN ISO 2151:2009

# Screw compressor C 9 N **C 9 RN to C 15 RN** C 9 DRN to C 15 DRN







#### **EFFICIENCY**

The specially designed BOGE airend provides high output volumes at low energy consumption - for reliable and efficient compressed air supply.

#### **EXTREMELY QUIET**

All C series compressors are characterized by very low sound pressure levels due to their super-silenced cabinets.



#### CONTROL

base control is the standard compressor controller with LC display and pressure sensor technology. focus control 2.0, offering additional monitoring and control options, is available as an optional extra.

**Compressed air stations – compact, efficient, very quiet:** The space saving C series screw compressors are designed for long-term performance. A refrigerant dryer with prefilter mounted on a horizontal receiver is available as an option. Even at full load operation, the compressor operates reliably and safely at optimum efficiency providing a long service life.

BOGE Model	Max. pressure**		Effective free	Effective free air delivery*		power	Dimensions W x D x H	U U
	psig	bar	cfm	m³/min	hp	kW	inches	lbs.
C 9 N	100	7	44	1.25	10	7.5	19 x 35.7 x 37.6	474
C 9 N	125	8.6	42	1.18	10	7.5	19 x 35.7 x 37.6	474
C 9 N	150	10	37	1.06	10	7.5	19 x 35.7 x 37.6	474
C 9 N	190	13	31	0.87	10	7.5	19 x 35.7 x 37.6	474

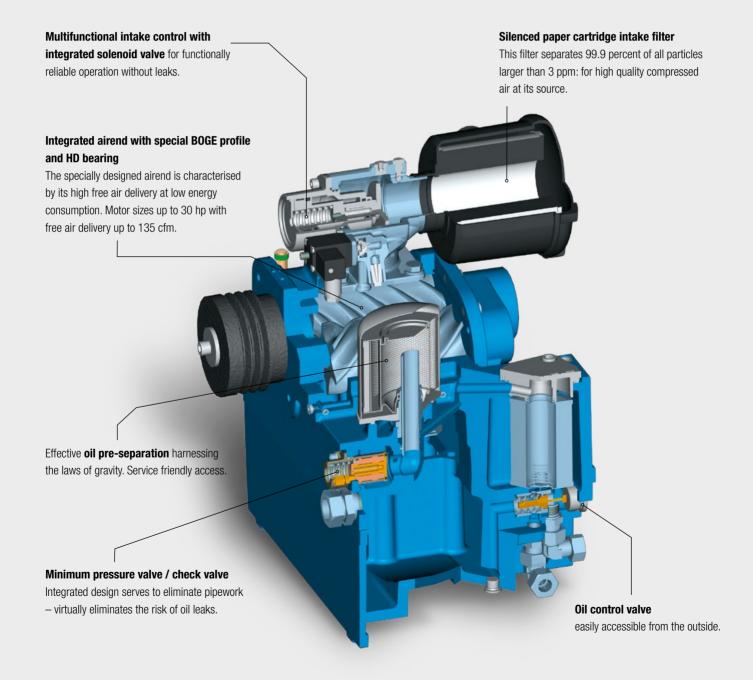
BOGE Max. pressure** Model		essure**	Receiver size	Effective fre	e air delivery*	Motor power		Dimensions W x D x H	<b>J</b>
model	psig	bar		cfm	m³/min	hp	kW	inches	
C 9 R N	100	7	120	44	1.25	10	7.5	12 x 36 x 60	916
C 9 R N	125	8.6	120	42	1.18	10	7.5	12 x 36 x 60	916
C 9 R N	150	10	120	37	1.06	10	7.5	12 x 36 x 60	916
C 9 R N	190	13	120	31	0.87	10	7.5	12 x 36 x 60	916
C 15 R N	100	7	120	61	1.74	15	11	71 x 33 x 78	1168
C 15 R N	125	8.6	120	61	1.74	15	11	71 x 33 x 78	1168
C 15 R N	150	10	120	56	1.58	15	11	71 x 33 x 78	1168
C 15 R N	190	13	120	47	1.33	15	11	71 x 33 x 78	1168

BOGE Model			Receiver size	Effective free	e air delivery*	Motor p	ower	Dimensions W x D x H	<b>J</b>
	psig	bar		cfm	m³/min	hp	kW	inches	
C 9 DR N	100	7	120	44	1.25	10	7.5	12 x 36 x 60	971
C 9 DR N	125	8.6	120	42	1.18	10	7.5	12 x 36 x 60	971
C 9 DR N	150	10	120	37	1.06	10	7.5	12 x 36 x 60	971
C 9 DR N	190	13	120	31	0.87	10	7.5	12 x 36 x 60	971
C 15 DR N	100	7	120	61	1.74	15	11	67 x 30 x 57	1613
C 15 DR N	125	8.6	120	61	1.74	15	11	67 x 30 x 57	1613
C 15 DR N	150	10	120	56	1.58	15	11	67 x 30 x 57	1613
C 15 DR N	190	13	120	47	1.33	15	11	67 x 30 x 57	1613

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 59 dB(A) according to DIN EN ISO 2151:2009

\*\* Max. pressure of the compressor

# The C series up to 22 kW: This is the way compressors are made today! Design advantages.



The state-of-the-art compressor: Extremely quiet, compact & efficient – the "large" BOGE C series airend has set an industry standard in specific power and sound pressure values. The BOGE compact module minimizes connections for a highly efficient and reliable compressor solution. Depending on your requirements, the C series up to 30 hp can be equipped with frequency control or heat recovery to meet the demands of any application!



#### **INTEGRATED DESIGN**

The integration of all essential components in the compact module serves to eliminate connections and to reduce flow losses: for maximum operating dependability and efficiency!



#### **COMPACT EFFICIENCY**

The BOGE C series is engineered to generate high free air deliveries in continuous operation and in an incomparably efficient manner. Due to its compact design, space requirements are kept to a minimum.



#### **CONTROL**

The compressor is controlled via the BOGE **base** control with LC display and pressure sensor technology. **focus** control 2.0 is available as an optional extra.



#### **MAXIMUM EFFICIENCY**

The BOGE C series up to 30 hp is characterized by its industry leading specific power ratios – for efficient compressed air supply.



#### **OPTIONAL HEAT RECOVERY**

A heat recovery system can be added as an option. Up to 94 percent of the input electrical energy is dissipated through the cooling medium (air or water) and can be recovered for space heating or pre-heating domestic water.

#### **OPTIONAL FREQUENCY CONTROL**

The frequency controlled option ensures a continuous volume flow between 25 and 100 percent. This ensures adaptation to the momentary demand of the compressed air system. Soft starting also avoids undue wear and tear and prolongs the service life of the compressor.

## Screw compressor **C 10 L N** to **C 20 L N** Compressed air system **C 10 LR N** to **C 20 LR N** Compressed air center **C 10 LDR N** to **C 20 LDR N**

Effective free air delivery:  $1.03 - 2.17 \text{ m}^3/\text{min}, 37 - 77 \text{ cfm}$ Pressure range: 8 and 10 bar, 115 and 150 psig Motor range: 7.5 - 15 kW, 10 - 20 hp

## Screw compressor C L N

Compact screw compressor, direct coupled



## Compressed air system C LR N

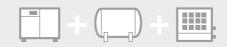
Receiver mounted screw compressor, direct coupled





## Compressed air center C LDR N

Receiver mounted screw compressor, direct coupled with dryer and prefilter



A class of its own: The directly coupled screw compressors of the C series are space saving and extremely efficient at the same time. They are available with horizontal receiver and/or top mounted refrigeration dryer with prefilter and can flexibly be adapted to suit particular application requirements.

BOGE Model	Max. pressure		Effectiv air delive	ve free ry* 60 Hz	Motor p	Motor power		Dimensions W x D x H	Weight
	psig	bar	cfm	m³/min	hp	kW		inches	lbs.
C 10 L N	150	10	37	1.03	10.0	7.5	3-phase	59 x 34 x 27	641
C 15 L N	150	10	67	2.15	15.0	11.0	3-phase	59 x 34 x 27	729
C 20 L N	150	10	77	2.17	20.0	15.0	3-phase	59 x 34 x 27	729
C 10 LR N	150	10	37	1.03	10.0	7.5	3-phase	69 x 34 x 57	998
C 15 LR N	150	10	67	2.15	15.0	11.0	3-phase	69 x 34 x 57	1086
C 20 LR N	150	10	77	2.17	20.0	15.0	3-phase	69 x 34 x 57	1086
C 10 LDR N	150	10	37	1.03	10.0	7.5	3-phase	79 x 34 x 60	1130
C 15 LDR N	150	10	67	2.15	15.0	11.0	3-phase	79 x 34 x 60	1218
C 20 LDR N	150	10	77	2.17	20.0	15.0	3-phase	79 x 34 x 60	1218

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 61 dB(A) according to DIN EN ISO 2151:2009

# Screw compressors: Fixed speed C 15 N to C 30 N Variable speed C 15 F N to C 30 F N



Effective free air delivery:  $0.27 - 3.83 \text{ m}^3/\text{min}, 9 - 135 \text{ cfm}$ Pressure range: 7 to 13 bar, 100 to 190 psig Motor range: 11 - 22 kW, 15 - 30 hp







#### **MAXIMUM EFFICIENCY**

The BOGE C series up to 30 hp is characterized by its industry leading specific power ratios. You rarely come across such compact screw compressor efficiency.



#### **EXTREMELY QUIET**

All C series compressors feature very low sound pressure levels.



#### **FREQUENCY CONTROL**

The optional frequency converter ensures a continuous volume flow between 25 and 100 percent. This allows adaptation to the momentary demand of the compressed air system. Soft starting also avoids undue wear and tear and prolongs the service life of the compressor.

#### CONTROL

base control comes standard with LC display and pressure sensor technology. **focus** control 2.0 is optional with additional monitoring, control and sequencing features. **focus** control 2.0 comes standard on VFD compressors.

BOGE

0

**Compact design, minimum floor space. This is as efficient as it gets:** In addition to our fixed speed line of compressors with energy saving wye-delta starters, BOGE also offers frequency controlled compressors for reduced energy consumption by matching compressor output to the system demand. Soft starting also avoids undue wear and tear and prolongs the service life of the compressor.

BOGE	Max. pr	essure		ve free		tor	Dimensions	Compressed	Weight
Model		her	air del cfm	ivery* m³/min	po\ kW	ver be	W x D x H	air outlet	lba
C 15 N	<b>psig</b> 100	bar 7	61	1.74	11	<b>hp</b> 15	inches 30.4 x 41.6 x 68.3	NPT 1"	lbs. 1035
C 15 N	115/125	8/8.6	61	1.74	11	15	30.4 x 41.6 x 68.3	NPT 1"	1035
C 15 N	115/125	0/0.0	56	1.74	11	15	30.4 x 41.6 x 68.3	NPT 1 NPT 1"	1035
C 15 N	190	13	47	1.33	11	15	30.4 x 41.6 x 68.3	NPT 1	1035
C 16 N	190	7	73	2.07	11	15	30.4 x 41.6 x 68.3	NPT 1	1055
C 16 N	115/125	8/8.6	69	1.96	11	15	30.4 x 41.6 x 68.3	NPT 1	1060
C 16 N	115/125	0/0.0	60	1.96	11	15	30.4 x 41.6 x 68.3	NPT 1 NPT 1	1060
		13	46	1.71	11	15		NPT 1 NPT 1	
C 16 N	190	7	46 95		15		30.4 x 41.6 x 68.3		1060
C 20 N	100	8/8.6	95	2.70		20	30.4 x 41.6 x 68.3	NPT 1"	1082
C 20 N	115/125			2.55	15	20	30.4 x 41.6 x 68.3	NPT 1"	1082
C 20 N	150	10	79	2.25	15	20	30.4 x 41.6 x 68.3	NPT 1"	1082
C 20 N	190	13	64	1.82	15	20	30.4 x 41.6 x 68.3	NPT 1"	1082
C 25 N	100	7	116	3.28	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1111
C 25 N	115/125	8/8.6	109	3.10	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1111
C 25 N	150	10	96	2.71	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1111
C 25 N	190	13	82	2.32	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1111
C 30 N	100	7	135	3.83	22	30	30.4 x 41.6 x 68.3	NPT 1"	1193
C 30 N	115/125	8/8.6	128	3.62	22	30	30.4 x 41.6 x 68.3	NPT 1"	1193
C 30 N	150	10	113	3.21	22	30	30.4 x 41.6 x 68.3	NPT 1"	1193
C 30 N	190	13	97	2.74	22	30	30.4 x 41.6 x 68.3	NPT 1"	1193
C 15 F N	115/125	8/8.6	14-61	0.39-1.74	11	15	30.4 x 41.6 x 68.3	NPT 1"	961
C 15 F N	150	10	12-53	0.35-1.50	11	15	30.4 x 41.6 x 68.3	NPT 1"	961
C 15 F N	190	13	9-47	0.27-1.32	11	15	30.4 x 41.6 x 68.3	NPT 1"	961
C 16 F N	115/125	8/8.6	19-69	0.53-1.96	11	15	30.4 x 41.6 x 68.3	NPT 1"	1116
C 16 F N	150	10	16-59	0.45-1.68	11	15	30.4 x 41.6 x 68.3	NPT 1"	1116
C 16 F N	190	13	22-46	0.64-1.30	11	15	30.4 x 41.6 x 68.3	NPT 1"	1116
C 20 F N	115/125	8/8.6	17-90	0.48-2.55	15	20	30.4 x 41.6 x 68.3	NPT 1"	1122
C 20 F N	150	10	15-78	0.43-2.21	15	20	30.4 x 41.6 x 68.3	NPT 1"	1122
C 20 F N	190	13	19-66	0.53-1.88	15	20	30.4 x 41.6 x 68.3	NPT 1"	1122
C 25 F N	115/125	8/8.6	23-109	0.64-3.10	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1133
C 25 F N	150	10	21-94	0.59-2.66	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1133
C 25 F N	190	13	15-81	0.44-2.31	18.5	25	30.4 x 41.6 x 68.3	NPT 1"	1133
C 30 F N	115/125	8/8.6	28-128	0.79-3.62	22	30	30.4 x 41.6 x 68.3	NPT 1"	1138
C 30 F N	150	10	24-111	0.67-3.15	22	30	30.4 x 41.6 x 68.3	NPT 1"	1138
C 30 F N	190	13	19-96	0.55-2.72	22	30	30.4 x 41.6 x 68.3	NPT 1"	1138

\* Free air delivery for the complete package in accordance with ISO 1217, Appendix E, at 68°F ambient temperature and maximum pressure. Emitted sound pressure values from 63 dB(A) according to DIN EN ISO 2151:2009).



Service your added value! Maximized reliability and economic efficiency are not the only technical advantages that BOGE has to offer. Our comprehensive service support program will ensure your BOGE compressed air system remains in tip top condition. Wherever you need us, whatever we can do for you: BOGE Service Support is always readily available close by – competent, to the highest standards, and always one step ahead.

# евосе best*cair*

#### **BOGE EXTENDED WARRANTY**

BOGE Genuine Parts enable you to extend your factory warranty up to 5 years: Furthermore, Genuine Parts ensures manufacturer's recommended maintenance schedule of new and existing equipment at the specified service intervals.

For more information email usa@boge.com



#### **BOGE ORIGINAL PARTS**

Only original BOGE spare parts have the manufacturer's technological edge. You can be confident when choosing BOGE original spare parts to ensure that the integrity of the compressor is maintained, efficiency is retained and your peace of mind is sustained.



#### **ALWAYS NEARBY**

BOGE has a network of dedicated distributors with factory trained service technicians at its disposal to help you with your installation, upgrading, commissioning, maintenance, repair, or inspection: You can rely on the know-how and experience of our qualified experts – at all times. Hotline Mobile Service: 770-874-1570



#### **EMERGENCY ASSISTANCE**

In the case of an emergency where immediate technical support is required, the BOGE product support trouble shooters or the BOGE Helpline team are available to you 24/7.

BOGE: 770-874-1570



#### **AIR AUDITS**

By analyzing your existing compressed air system, our energy efficiency experts can identify where savings can be made. The BOGE AIReport includes measurement of: dew point control, leakage, oil check and TAN check.



#### **TRAINING COURSES**

The BOGE Training Courses were established in order to train and certify internal employees and our distributors as qualified BOGE Service Technicians. Attendance of Training Courses held in the in-house training center further assist in refreshing existing BOGE Service Technician's knowledge at regular intervals.

#### BOGE AIR. THE AIR TO WORK.



BOGE COMPRESSORS BOGE AMERICA, INC. 3414 Florence Circle Powder Springs, GA 30127 Tel. 770-874-1570 · Fax. 770-874-1571 us.boge.com · usa@boge.com



In more than 120 countries worldwide customers from mechanical engineering, industry and trade trust the BOGE know-how in planning, development and production of high quality compressed air systems. Already in its fourth generation, the family-owned company puts all its experience in the development of innovative solutions and outstanding efficient products for the compressed air industry.

Rightly, therefore, the last name of the founder Otto Boge stands for "Best Of German Engineering" today. Who puts emphasis on German engineering skills, highest safety, reliable services and energy efficiency, accesses quality products from BOGE because they have been supplying "the air to work" for more than 100 years.

#### **OUR RANGES OF SERVICES INCLUDE THE FOLLOWING:**

- Energy efficient systems development
- Plant design and engineering
- Industy 4.0 solutions, system control and visualisation
- High Speed Turbo compressors
- Oil-free piston, screw and scroll compressors
- Oil injected screw compressors and oil lubricated piston compressors
- · Compressed air treatment
- Compressed air distribution and storage
- Compressed air accessories
- Compressed air service
- Nitrogen and oxygen generators



